Unemployment and Subjective Well-being : An Empirical Test of Deprivation Theory, Incentive Paradigm and Financial Strain Approach

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An Empirical Test of Deprivation Theory, Incentive Paradigm and Financial Strain Approach

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abstract: In this article we focus on the level of subjective well-being and its determinants among the unemployed as compared to those currently in paid labour. We subject three strongly contradictory theoretical approaches to an empirical test. The first is the traditional deprivation theory, which maintains that unemployment is a major psychological stressor. The second is the incentive theory, which claims that the level of well-being among the unemployed may be sufficiently high to discourage them from actively and effectively searching for a new job and re-entering the labour market. The third approach emphasizes the adverse effects of financial stress for subjective well-being during unemployment. We use the European Social Survey (ESS) data from 21 countries in our empirical analysis. We find no support for the incentive theory. The deprivation theory points in the right direction by stressing the psychological factors associated with unemployment but makes a notable omission by disregarding the financial strain which, according to our analysis, proves to be crucial for the well-being of the unemployed.

Keywords: deprivation theory, economic deprivation, financial strain, incentive theory, subjective well-being, unemployment

Introduction

What happens to individual well-being during unemployment? In this article we test, empirically, three possible theoretical answers to this question. Although the history of research on the consequences of unemployment is long and theoretically nuanced (see Halvorsen (1999) for an overview), basically three contradictory interpretations have recently gained more popularity than others in the field. First, it has been argued that unemployment is a major psychological stressor, monetary distress being only of secondary importance. This approach is often labelled as the *deprivation theory*, which represents the mainstream sociological and psychological

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tradition starting from the classic work of Marie Jahoda (Jahoda et al., 1971; Jahoda, 1982). Second, however, an entirely opposite view of the life situation of the unemployed has become increasingly influential among policymakers in most European countries since the 1990s. We call this view the *incentive theory*. The academic origins of this approach can be traced to structural interpretation, i.e. institutional determinants of unemployment (e.g. Nickell et al., 2005; Blanchard, 2006), supply-side view of the labour market and the related job-search theory (e.g. Mortensen, 1977). According to the incentive approach, unemployment does not cause any serious damage to individual well-being. Instead, the proponents of the incentive theory have suggested that the level of well-being among the unemployed is sufficiently high to discourage them from actively and effectively seeking work. According to this view, a significant part of the cause of unemployment is more or less voluntary. But the debate is far from over. In contrast to both approaches presented above, a third line of reasoning lays a special emphasis on the importance of *financial strain* during unemployment as an important determinant of the decline in subjective well-being among jobless individuals (e.g. Starrin et al., 1996; Halvorsen, 1999; Nordenmark and Strandh, 1999; Goul Andersen, 2002). Employment is still the main source of income for most people, and therefore unemployment generates financial strain, which in turn translates into a decline in subjective well-being.

In the following pages we subject these three well-argued approaches to an empirical test. We argue, consistent with the financial strain approach, that neither the psychologically oriented deprivation theory nor the economically oriented incentive theory is entirely correct. We show that the incentive theory runs contrary to most of the empirical evidence. It does not capture the essential elements of the life situation and behaviour of the unemployed; to a certain extent, the deprivation theory also fails in this regard. Most importantly, while the theory stresses the psychological effects of unemployment, it underestimates the strong economic consequences generated by unemployment. We support the argument that unemployment severely damages subjective well-being mainly due to financial constraints. We use the ESS Round 1 data from 2002/2003, covering 21 countries (Jowell et al., 2003) to sustain our argument.

The structure of the article is as follows. First we take a look at previous research into the association between unemployment and subjective well-being. Our aim is not to provide a comprehensive review, but, instead, to examine in more detail the incentive theory and the deprivation theory. As our main argument is that both of these theoretical traditions severely underestimate or misinterpret the importance of monetary income, we simultaneously review earlier evidence of the detrimental effects of financial strain during unemployment. After the literature review we present our research design in more detail and formulate our theoretical standpoints in a set of empirically testable hypotheses. We also describe the data and the methodological choices we have made in our analysis. Then we present the results obtained through our descriptive analysis, regression methods and multi-level models. Finally we conclude with a more general discussion of the theoretical implications of our results.

Deprivation theory, incentive paradigm and financial strain approach

The main argument of the deprivation theory is based on the early social-psychological studies on unemployment (Jahoda et al., 1971; Jahoda, 1982). The theory strongly emphasizes the importance of work and especially the multidimensional latent functions of work in people's lives. According to Jahoda's classical interpretation, unemployment damages mental well-being because it deprives people of the latent functions that employment provides. These functions are time structure, purposefulness, participation, contacts and regular shared experiences outside the family, information about personal identity, a link with collective purpose and enforced activity. Even in the original version of the deprivation theory, the latent functions of work were not the sole determinants of individual well-being. Included also was the manifest function of

receiving salary for work performed. However, the fact that the latent functions were given an overwhelmingly central importance in the model has, among other things, raised criticism.

For example, in the famous 'Vitamin' model of well-being during unemployment (Warr, 1987), monetary resources are presented as one of the factors that, analogous to the way that vitamins affect physical health, have a crucial impact on mental health. Another source of criticism for the deprivation theory is the so-called 'Agency Restriction' model presented by David Fryer (1986, 1995). This model presents the unemployed as being proactive rather than reactive or passive victims of unfortunate circumstances, as the deprivation theory seems to suppose at least implicitly. The unemployed, like other people, are active agents who aim to organize and structure their own affairs, make decisions on their own lives, strive to assert themselves and make plans for the future. The negative consequences of unemployment arise because possibilities to exercise personal agency are strongly restricted during unemployment. In particular, declining economic resources limit the ability of individuals to plan and organize satisfying life styles, which in turn has a detrimental effect on well-being (Fryer, 1995: 270). The unemployed try to find various ways of coping with the transition from employment to unemployment (Halvorsen, 1999). The extent to which they succeed depends on an array of personal, social and economic resources, of which, in the light of recent evidence (Halvorsen, 1999; Nordenmark and Strandh, 1999; Julkunen, 2001; Goul Andersen, 2002; Alvaro and Garrido, 2003), economic resources are the most crucial.

Lack of monetary resources restricts coping ability and personal agency and consequently is detrimental to a person's well-being. Hence, the availability of money is an important prerequisite to coping. Also, financial resources improve access to other important resources, such as social and leisure activities, food, housing and general physical security (Ullah, 1990; Hobfoll et al., 1996). Indeed, Jones (1992: 362) suggests that 'availability of income may be the most important determinant of the expression of psychological and health symptoms related to unemployment ...'.

A large body of research has shown that economic stress is associated with mental problems (e.g. Feather, 1989; Creed and Macintyre, 2001; Vinokur and Schul, 2002). In particular, the economic-shame model introduced by Starrin and his colleagues (Brenner and Starrin, 1988; Starrin et al., 1996) emphasizes the importance of financial hardship. Starrin suggests that lack of money stimulates feelings of shame and degradation, as a result of the perception of the views of others, and even stigmatization which in turn lead to declining well-being.

From a sociological perspective, it is surprising how often in social research the restrictions imposed by economic deprivation on people's lives are disregarded. It is quite evident that lack of money reduces not only individual autonomy but also the ability to maintain an established lifestyle. A failure in some previous research is the inability to distinguish between the psychological effects of unemployment and those of poverty usually accompanying it.

Nevertheless, the incentive theory supports a rival interpretation of the association between unemployment and well-being, based on the theories of structural unemployment (e.g. Nickell et al., 2005; Blanchard, 2006) and the related theory of job-search (e.g. Nickell, 1997). In these theories, the unemployed person is seen in an entirely different light. The theory of structural unemployment views unemployment as a problem of the supply-side of the labour market. Thus, the job-search behaviour of the unemployed plays a dominant role in the determination of the overall unemployment in a given country. An important reason for the high unemployment rates during the last decades in most European countries is the widespread unwillingness to work which in turn manifests itself as a low level of job-search among the unemployed. Historically, the current popularity of the incentive theory is directly related to the recent international paradigm change in labour market policies, in which demand-side theories were superseded by supply-side economics (see Goul Andersen and Halvorsen [2002] for an overview).

Basically, the incentive theory suggests that high levels of unemployment are a product of inflexible labour markets and welfare states. Even high economic growth will only reduce unemployment down to the threshold of structural unemployment. Without major structural changes

in the regulation of the labour market, formation of wages and social security benefits, it is not possible to reach a lower level of unemployment with stable prices (Nickell, 1997; Blanchard, 2006).

According to the theory of structural unemployment, the most efficient way to improve unemployment records is to create more economic incentives for job-search. Passive labour market policies, like unemployment benefits, are incapable of this. Instead, too generous unemployment benefits encourage people to laziness, and not actively to seek work. An often-heard claim is that the levels of unemployment benefits and other social security benefits are too high and thus create economic disincentives (e.g. Siebert, 1997). This applies especially to the Nordic welfare states, with their outstanding coverage and comparatively high levels of unemployment benefits, but also to other European countries.

All in all, compared to the deprivation theory approach, the incentive paradigm offers an entirely contrasting view of unemployment and the life situation of the unemployed. Many are unemployed voluntarily because they are completely satisfied with their situation and thus have a weak motivation to search for a job and re-enter the labour market. In broad terms the incentive approach emphasizes that an individual's ability to get a job is to a large extent determined by his/her job-seeking behaviour. Accordingly, the behaviour of the unemployed can and should be manoeuvred by means of economic and non-economic incentives. For the incentive theorist the problem is the too high, not too low, levels of well-being and financial resources among the unemployed.

Research design

The literature review presented above leads us to formulate our research questions more precisely. First, we ask whether there is a difference in well-being between the unemployed and those currently employed. Two hypothetical answers can be given. According to the long line of empirically well-grounded psychological and sociological research, there is a clear difference between the two groups, and undoubtedly unemployment decreases well-being either for psychological or economic reasons. On the other hand, according to the incentive theory, there is no notable difference. By contrast, the levels of well-being are far too high for the unemployed to effectively seek work, especially in countries where the unemployment benefits are high. We test these assumptions first with descriptive evidence and then with regression methods controlling for certain other factors possibly affecting the well-being of both unemployed and employed individuals.

Our second question concerns the determinants of the possible decline of well-being among the unemployed. The crucial issue is whether the well-being of the unemployed is determined by the lack of work *per se* or economic strain. Unfortunately, we have no psychological variables in our data. Nevertheless, the differences suggested by the deprivation theory should be reflected in variation according to certain personal characteristics like gender, family structure, age, stratification hierarchies, physical health, sociability, personal attachment to the labour market and religiosity, as discussed below. Undoubtedly, it is a limitation of our study that our data do not allow for direct testing of psychological factors. Nevertheless, we believe that the socio-demographic variables will reveal significant variations in the well-being of the labour force. Finally, we use variables measuring the current economic conditions of the respondents to control for the differences in well-being between the unemployed and those who are currently employed.

Data

We use data from 21 European countries included in the ESS Round 1 data from 2002/2003 (Jowell et al., 2003). The survey was conducted through face-to-face interviews on random

probability samples representing eligible residential populations aged 15 or more. In most cases, the response rates were higher than 65 per cent.[1]

The variables were aggregated and manipulated to a certain extent, as summarized in Table 1. We describe these variables in detail below.

Dependent variable

Subjective well-being. Subjective well-being is not unambiguously defined in earlier research. We follow Goul Andersen's (2002) notion of subjective well-being as a multidimensional concept. We perceive it as a broader concept than, for example, psychological distress or mental health, both important components of well-being. Thus, the indicators measuring well-being in this study operate at the most general level; they are built from the *average* quantitative measurements of subjective perceptions of *life satisfaction and happiness*. Of course, satisfaction of life and happiness are not the same thing in a strict sense. Veenhoven (1984: ch. 2; 1996: 14) emphasizes that people use two sources of information to appraise how much they appreciate the lives they live; affective and cognitive. Individuals estimate their affective experience to assess how well they feel generally, i.e. how happy they are. In a more cognitive manner, people may be comparing life as it is with standards of how life should be. As we adopt a wide perspective on the concept of subjective well-being, we consider the two variables as indicators of subjective well-being, an underlying latent variable. Both factor analyses and reliability analyses support our argument. Factor loadings were consistently above 0.60 for both variables in all countries and the Cronbach's alphas were over 0.70 in all countries. Moreover, we analysed the two variables separately, utilizing descriptive and regression methods. As those analyses yielded substantively the same results as the ones with a scale combining the two variables, we chose the composite scale as our dependent variable.

Independent variables

Employment status. This is our main independent variable of interest. We regress the respondents' level of subjective well-being against their employment situation, controlling for different factors. Which factors – if any – we include in our models depends on the theories of subjective well-being explained earlier. We compare whether the level of well-being differs significantly between the unemployed and those currently in employment.

The number of unemployed in the sample is not large. However, by combining all unemployed, regardless of whether they are coded as actively seeking work or not in the ESS, we obtain reasonable subsamples of the unemployed in all countries. The variable of employment status consists of two categories:

- Respondents who declare that they are unemployed and have or have not actively been searching for a job during the previous seven days were coded as unemployed
- Respondents who are currently employed and have had a paid job during the previous seven days were coded as employed.

Financial Resources. We hypothesize that financial resources are one of the main determinants of the differences in well-being between the unemployed and those who have a job. In the ESS, financial resources are measured by directly asking the respondents about their monthly income. A related construct, but yet distinguishable, is *perceived financial strain*. That, sometimes labelled *perceived financial hardship*, was examined by asking respondents to indicate how difficult it is to meet their everyday expenses. We utilize both variables when we test our main hypothesis that financial constraints are major factors explaining the differences in subjective life satisfaction between the employed and the unemployed. Because of the similarity of the two variables, we ran correlation tests; in no instances did the correlation coefficient exceed abs (0.56), below the abs(0.80) level considered a threat of multicollinearity.

Table 1 *Variable description and aggregations*

Variable	Explanation	Type	Original scale	Utilized in models as/Aggregated scale
well-being	(happiness+satisfaction)/2	ordinal	0...10	Continuous 0 (= extremely dissatisfied/unhappy) 10 (= extremely satisfied/happy)
employed	employment situation	binary	0/1	Dummy 0/1 (read earlier on the criteria used to classify the employed and the unemployed)
hinctnt2	total household income	ordinal	1...12	3 categories 1 (= 1, 2, 3, 4 lower, REF. cat.) 2 (= 5, 6, 7, 8 average) 3 (= 9, 10, 11, 12 higher)
hincfel2	feeling on household income	categorical, ordinal	1...4	3 categories 1 (= 1 comfortable, REF. cat.) 2 (= 2 cope) 3 (= 3, 4 difficulties)
occupation	occupation (7 strata)	nominal	ISCO86	7 categories Grouped as by Erikson and Goldthorpe (1992) 1 (= Services I, high-skilled pros white collar, REF. cat.) 2 (= Services II, high-skilled pros white collar) 3 (= Routine non-manual, skilled white collar) 4 (= Skilled manual, blue collar) 5 (= Unskilled manual, blue collar) 6 (= Self-employed) 7 (= Other)
edulvl2	education	ordinal	0...6	3 categories 1 (= 0, 1 up to primary, REF. cat.) 2 (= 2, 3, 4 secondary) 3 (= 5, 6 tertiary)
gndr	gender	binary	1/2	Dummy 1 (= male) 2 (= female)

(continued)

marital2	marital status	nominal	1...5	3 categories 1 (= 1 married, REF. cat) 2 (= 2, 3, 4 separated., divorced, widowed) 3 (= 5 never married)
chldhm	children at home	binary	1/2	Dummy 1 (= yes) 2 (= no)
age	age	continuous	continuous	Continuous age
age2	age squared	continuous	age*age	Continuous age*age
health2	health	ordinal	1...5	3 categories 1 (= 1, 2 good or very good, REF. cat) 2 (= 3 fair) 3 (= 4, 5 bad or very bad)
sclmeet2	social networks	ordinal	1...7	3 categories 1 (= 1, 2, 3 up to once/month, REF. cat) 2 (= 4, 5 up to once/week) 3 (= 6, 7 up to everyday)
rlgblg	religiosity	binary	1/2	Dummy 1 (= yes) 2 (= no)
impwrk2	importance in life: work	ordinal	0...10	3 categories 1 (= 0, 1, 2, 3, 4 unimportant, REF. cat.) 2 (= 5, 6, 7 average) 3 (= 8, 9, 10 important)

Stratification hierarchies. Considering stratification hierarchies more generally, earlier research suggests that not only income but also *occupation* and *level of education* affect the psychological impacts of unemployment. As Whelan (1994: 49) puts it: 'one of the most consistently documented associations in psychiatric epidemiology is that between social class, socio-economic status and psychological distress'. Theoretical explanations for this are based on either the so-called social selection argument or the social causation perspective. The former argues that natural competitive conditions lead to the existing distribution of psychological distress across the class structure. Thus, one's mental state helps determine a person's social position. The social causation argument emphasizes the life conditions to which lower class people are exposed, so that one's social position determines his or her mental state (Whelan, 1994). From the perspective of the deprivation theory we hypothesize that those in the upper strata may have more resources to find substitutes for the losses of time structure, social status, etc. Alternatively, it may also be that the relatively greater losses (i.e. losing a higher and a more respected position, a more rewarding job, etc.) would generate even stronger decline in well-being among the upper rather than the lower strata. Moreover, from the incentive theory perspective, it may be that incentives to work vary notably according to social stratification, although empirical support for this remains weak (Svallfors et al., 2001). Our data allow us to use the Erikson–Goldthorpe scheme (Erikson and Goldthorpe, 1992) for occupational status; we distinguish between seven occupational classes (Service class I, Service class II, Routine non-manual workers, Skilled manual workers, Unskilled manual workers, Self-employed and Unclassified or missing). Education is measured on three levels based on international ISCED coding. For income, we also use a categorical measure which distinguishes three income groups in each country.[2]

Gender and family background. One of the implications of the deprivation theory concerns the substitution of the psychological loss related to unemployment within the sphere of family. As unemployment means the loss of time structure, purposefulness of life, social status and information about personal identity, unemployed persons may acquire substitution within their families. Especially for women, the withdrawal to the family sphere may sound a natural choice. Thus, the traditional assumption is that women are less affected by unemployment than men are. This assumption is based on the gender variation in work commitment (e.g. Hakim, 1991). Work plays a more important role in men's lives while, by contrast, the domestic role is more important to women. In line with the deprivation theory, it can be argued that the domestic role of women may compensate for some of the latent negative effects of unemployment. According to Jahoda (1982: 53), the traditional role of housewife provides some time structure, some sense of purpose, status and activity even though it offers little scope for wider social experiences. Also, family background could have both negative and positive effects on psychological well-being. Being *married* and having *children at home* may lead to responsibilities and commitments that reduce personal control but provide the opportunity to engage in activities that contribute to psychological well-being. On the other hand, a supportive spouse can help an individual maintain or even increase feelings of happiness and well-being (see Goldsmith et al., 1997).

Moreover, it may be argued that women's unemployment is not so dramatic in financial terms, either, which is interesting particularly within the frame of reference of the incentive theory. Women are frequently the second earners in the household in many countries. However, empirical research does not give consistent support for the argument of gender differences (see Gallie and Russell (1998), for the argument; Ensminger and Celentano (1990) and Waters and Moore (2002), against the argument). Some might claim that variation of levels of subjective well-being in gender is a consequence of traditional gender roles. Thus, we might expect that the variation becomes less important if and when new gender role-thinking is adopted. At the same time, variables measuring family and marital status should become more important predictors of

mental well-being among both the male and female unemployed. To control for all these, we include binary variables for the respondent's gender and the presence of under-age children in the respondent's household. In addition, we classify marital status as married, formerly married and never married.

Age. The deprivation theory also suggests that unemployment is likely to exert relatively less psychological damage on younger age groups than upon older persons. Like women, young individuals are simply better positioned to establish functional alternatives to work, and are therefore less vulnerable to unemployment-related distress. Moreover, they place less value on social position than do older persons (Warr, 1987). However, a contrasting argument could be based on speculation about the growing sense of self-worth as people mature.

As with gender, the effects of age may also be connected to the financial situation. The higher level of economic strain among the younger age groups might imply that the older a person gets, the better he or she fares even during unemployment. However, there is evidence suggesting that younger people are more adaptive to economically strained situations (Ervasti, 2004). Here, we use a continuous variable for the respondent's age, and its square to control for possible non-linear effects.

Social networks. Interpretations of the role of social networks of the unemployed have also strongly divided earlier studies. The incentive theorists have emphasized the possible emergence of a dependency culture among the social networks of the unemployed (e.g. Murray, 1990). In other words, it is feared that the unemployed create a subculture in which work values deteriorate and the normal way of life is based on social security benefits. In contrast, the deprivation theorists have stressed declining social networks and social isolation among the unemployed (see Jahoda, 1982). This seems appropriate, since a growing body of evidence substantiates the importance of the surrounding community for the psychological well-being of the unemployed (Kessler et al., 1988; Winefield et al., 1992; Bjarnason and Sigurdardottir, 2003). At their best, close and intensive social networks can reduce psychological distress among the unemployed very effectively (Thoits, 1982). In this analysis, we use a three-level ordinal measure for how often the respondent meets friends, relatives or colleagues socially.[3]

Religiosity. Prior research shows contradictory evidence of the effects of religiosity on subjective well-being. Some studies show religion and mental health to be positively related, whereas others find none (Gartner et al., 1991; Larson et al., 1992). Nevertheless, theoretically there are several reasons to expect a positive correlation between religiosity and well-being. Frey and Stutzer (2002: 59–60; see also Ellison, 1991: 80) distinguish four possible reasons for religiosity increasing subjective well-being. First, religious involvement may serve as an important source of social support which has a positive effect on one's well-being. Second, religious experiences offer many individuals a sense of meaning in their lives. In particular, belief in an afterlife provides existential certainty. Third, religious persons may be happier than non-religious individuals due to their healthier living habits (see also Jarvis and Northcott, 1987). Fourth, and most importantly for our purposes, religiosity may provide individuals with resources to cope with adverse situations, like unemployment. For example, religious persons may cope with unpleasant situations by explaining their conditions as the 'Will of God'. For religiosity we use a binary variable on whether the respondent belongs to any religious denomination.

Perceived importance of work. The effects of work motivation and perceived importance of work have received relatively little attention in earlier research as predictors of subjective well-being (however, see Halvorsen (1999) and Nordenmark (1999) as exceptions). This is surprising. Perceived importance of work actually sums up the core idea of deprivation theory. Basically,

personal non-financial attachment to work corresponds very closely to Jahoda's original latent functions. It is therefore reasonable to assume that a high level of personal attachment to work life and a strong work motivation may be a source of frustration among the unemployed as their willingness to work is not fulfilled. Those with a high level of commitment to work are more vulnerable than those who do not consider paid work as one of the most important things in their lives. The indicator of perceived importance of work is based on an ESS item asking how important an issue work is in the respondent's life by comparison with family, friends, leisure time, politics, religion and voluntary organizations.

Country groups. Bearing especially the incentive theory in mind, we also control for the possible effects of institutional settings in various welfare states. As both the levels and duration periods of unemployment benefits and other relevant social security benefits vary across European welfare states, we could expect to find variation in the well-being among the unemployed too. Following the typology of the ESS countries suggested by Ervasti et al. (2008), we distinguish between Nordic (Denmark, Finland, Norway and Sweden), Continental European (Switzerland, Germany, Luxembourg, The Netherlands, France, Austria, Belgium), Southern European (Greece, Italy, Portugal and Spain) and Eastern European welfare states (the Czech Republic, Hungary, Poland and Slovenia). The two remaining countries, namely the UK and Ireland, form a separate group of 'Liberal' welfare states. Based on the deprivation theory, we expect that differences in well-being between the unemployed and the employed should be the lowest in the most advanced welfare states (Nordic and Continental countries) and the highest in less developed welfare states (Southern, Eastern and Liberal countries).

Health. Although neither the deprivation theory nor the incentive approach gives any clear suggestions about the effects of health on well-being, we include it in our analysis because health is an especially important determinant of mental well-being (e.g. Clark and Oswald, 1994; Gerdtham and Johannesson, 2001). Generally, the unemployed have a lower level of physical health than employed individuals (e.g. Béland et al., 2002). The direction of the causal relationship between health and unemployment is, however, unclear. It may be that unemployment stimulates health problems. Alternatively, it is possible that those with physical health problems are more likely to lose their jobs than are healthy individuals. Health is measured within three categories (good or very good, fair and bad or very bad).

Results

Descriptive findings

To briefly reiterate, the dependent variable used was the average of the happiness and satisfaction indices (Well-being=[happiness + satisfaction]/2). Table 2 gives the mean value for this variable per country both for the unemployed (range 5.01–7.57) and the employed (6.18–8.51). Denmark looks to have the most satisfied respondents (8.44) and Poland the least satisfied (5.99). Clearly, in all countries surveyed, on average, the employed respondents reported higher levels of subjective well-being than their unemployed compatriots.

Most of the independent variables were categorical with many substrata. To increase the number of observations per strata, we aggregated them (Table 1). Table 3 lists the mean values of all categorical (dummy) and continuous RHS (Right Hand Side) variables used. Not surprisingly, the richest respondents were found in Switzerland and the poorest in Poland. Danes seemed to be the most satisfied with their household income, whereas dissatisfaction on family income was most common among French respondents. In terms of educational background the most educated respondents were found in Israel, whereas the least educated were in Portugal. In

Table 2 *Mean levels of well-being (happiness + satisfaction / 2) by country, controlled for employment*

Country	Observations for unemployed	Well-being (0/10) for unemployed	Observations for employed	Well-being (0/10) for employed	Well-being (0/10)	Total observations
AT	46	6,62	700	7,72	7,65	746
BE	85	7,18	660	7,69	7,63	745
CH	32	7,03	872	8,01	7,98	904
CZ	34	5,44	367	6,79	6,67	401
DE	204	5,01	1031	7,23	6,86	1235
DK	60	7,57	755	8,51	8,44	815
ES	76	6,57	369	7,30	7,18	445
FI	100	7,51	860	8,00	7,95	960
FR	83	5,92	556	6,96	6,82	639
GB	73	5,64	853	7,33	7,20	926
GR	71	5,69	458	6,47	6,36	529
HU	83	5,12	509	6,18	6,03	592
IE	80	6,44	707	7,80	7,66	787
IT	62	5,60	223	6,95	6,65	285
LU	13	6,77	370	7,79	7,76	383
NL	44	7,06	1049	7,79	7,61	1093
NO	66	6,91	1160	7,87	7,82	1226
PL	235	5,45	588	6,20	5,99	823
PT	40	5,98	428	6,52	6,47	468
SE	69	7,13	1037	7,87	7,82	1106
SI	86	6,15	487	6,96	6,84	573

Note: AT = Austria; BE = Belgium; CH = Switzerland; CZ = Czech Republic; DE = Germany; DK = Denmark; ES = Spain; FI = Finland; FR = France; GB = Great Britain; GR = Greece; HU = Hungary; IE = Ireland; IT = Italy; LU = Luxembourg; NL = The Netherlands; NO = Norway; PL = Poland; PT = Portugal; SE = Sweden; SI = Slovenia.

Portugal, we had the most female respondents and in Belgium the most male. The highest numbers of children still living at home were reported in Great Britain and the fewest in Slovenia. The youngest respondents were in Poland and the oldest in the Czech Republic. The Irish considered themselves to be the healthiest and the Hungarians the least healthy. Social activity was reported to be highest in Norway and lowest in Hungary. Greeks were the most actively religious nation, and the Czechs the least active. Finally, Greeks also thought that work in life is more important than did any other country group; the Irish scored lowest in this.

Regression findings

We ran regression models at two levels: (a) using all the data from all 21 countries pooled together and (b) disaggregating the data and running regressions separately per country.

We ran *two* different versions of these models. In the first, we clustered the data on a *per country* basis, whereas in the second we grouped (and clustered) the existing countries in five categories: the Nordic, Southern, Eastern, Continental and Liberal countries.

We ran multi-level models where the level 1 consisted of individual level variables while the level 2 variable was either the country or the group of countries. The country variable and the country-group variable were clustered because we hypothesized that there can be different attitudes and perceptions within each country due to different political, socio-economic, cultural and institutional settings; the same could apply at a more general level within the groups of countries.

Table 3 *Mean values of independent variables by country*

Country	employed (0/1)	hinctnt2 (1/3)	hincfel2 (1/3)	edulvl2 (1/3)	gndr (1/2)	chldhm (1/2)	age (cont.)	health2 (1/3)	sclmeet2 (1/3)	rlgblg (1/2)	impwrk2 (1/3)	observations
AT	0.94	1.87	1.84	2.18	1.51	1.47	40.72	1.18	2.37	1.34	2.59	746
BE	0.89	2.03	1.69	2.09	1.42	1.50	38.48	1.15	2.38	1.58	2.65	745
CH	0.97	2.74	1.48	2.20	1.47	1.59	41.59	1.12	2.44	1.43	2.71	904
CZ	0.92	1.16	2.24	2.12	1.51	1.45	44.62	1.37	2.04	1.78	2.70	401
DE	0.84	2.01	1.91	2.23	1.48	1.53	42.13	1.39	2.22	1.51	2.71	1235
DK	0.93	2.52	1.37	2.22	1.48	1.52	41.35	1.18	2.48	1.45	2.67	815
ES	0.83	1.53	1.88	2.04	1.42	1.53	38.60	1.27	2.40	1.33	2.69	445
FI	0.90	2.08	1.92	2.30	1.50	1.54	41.00	1.23	2.31	1.27	2.75	960
FR	0.87	1.45	2.43	2.21	1.53	1.47	39.12	1.33	2.47	1.60	2.56	639
GB	0.92	2.26	1.72	2.31	1.51	1.60	40.21	1.20	2.29	1.56	2.44	926
GR	0.87	1.43	2.41	2.12	1.44	1.54	37.87	1.13	2.01	1.04	2.87	529
HU	0.86	1.12	2.39	1.97	1.48	1.38	40.21	1.51	1.72	1.43	2.70	592
IE	0.90	1.87	1.71	2.06	1.50	1.47	39.00	1.09	2.28	1.20	2.49	787
IT	0.78	1.78	1.97	1.98	1.52	1.43	40.19	1.30	2.25	1.24	2.73	285
LU	0.97	2.46	1.60	2.02	1.40	1.43	38.31	1.32	2.27	1.30	2.79	383
NL	0.96	2.16	1.50	2.26	1.50	1.51	40.18	1.20	2.49	1.63	2.56	1093
NO	0.95	2.60	1.51	2.33	1.45	1.50	40.92	1.19	2.67	1.50	2.67	1226
PL	0.72	1.09	2.41	2.08	1.47	1.35	37.39	1.42	1.93	1.09	2.82	823
PT	0.92	1.40	2.23	1.62	1.58	1.45	40.00	1.44	2.51	1.20	2.72	468
SE	0.94	2.18	1.51	2.23	1.47	1.53	41.79	1.24	2.43	1.74	2.67	1106
SI	0.85	1.29	1.80	2.19	1.52	1.35	38.16	1.40	2.10	1.56	2.80	573

Note: hinctnt2 = total household income; hincfel2 = feeling on household income; edulvl2 = education; gndr = gender; chldhm = children at home; sclmeet2 = Social networks; rlgblg = religiosity; impwrk2 = importance in life: work. Country abbreviations as in Table 2.

We ran both fixed effects (FE) and random effects (RE) models[4] (Rabe-Hesketh and Skrondal, 2008). We initially compared whether there were differences in well-being between employed and unemployed controlling for covariates and clustering based on the country or on the five groups of countries. In this case, FE modelling is appropriate because we compare the mean levels of subjective well-being among the employed and the unemployed. RE modelling, on the other hand, uses the cluster variable as a random one, and can account for variability of our dependent variable, not only *within* the cluster but also *between* the categories of the cluster. In other words, with the RE approach we now take into account how being employed or unemployed affects one's well-being across the sample of the 21 countries, in *addition* to within each country or within the 5 groups of countries. Finally, it is interesting to examine if the results differ between the two modelling approaches, and, if so, to what extent. We hypothesized that if our results are robust, both FE and RE models should produce (in similar model specifications) a coefficient of the employed dummy of similar magnitude, with the same sign and similar statistical significance.

In all cases (also in the disaggregate analysis later on), we conducted three types of regression, i.e. with three different variable specifications. In the first specification, NOC (NO Control variables), we simply regressed the subjective well-being variable (*hapstf*) against the employment status (*employed*). This specification tests the main assumption posed by the incentive theorists; the theory gains support in cases where the level of well-being is not significantly weaker among the unemployed when compared to those who are currently employed. In the second specification, WOF (WithOut Financial variables, with control variables), we added a set of control variables based on the discussion in the previous section on the RHS of the models. The control variables were: *age, age*age, gender, health status, educational level, social activity, importance of work in life, religious beliefs, type of occupation, marital status and whether children were still at home*. Except for age and age squared that were continuous, all other aforementioned variables were treated in the models as dummies (see Table 1). We believe that we can test the core assumptions of the deprivation theory with this specification, although the reflections of psychological variation are captured only with socio-demographic proxies. The deprivation theory gets support in cases where the controls eliminate the possible difference in well-being between unemployed and employed individuals. Finally, in the third specification, WIF (WIth control variables and Financial variables), we added two further dummy variables of financial nature: *the total household income and how well one copes with his/her household income* (see Table 1). This final specification allows us to test the effects of financial strain on well-being among the unemployed.

We ran all models with the restriction that all the variables included in the third specification (WIF) were *not* missing from any runs of previous specifications. For example, respondents with no information on their household income were not included in the models of specifications one (NOC) and two (WOF), although that variable was not in those models' RHS. The observations per model are constant across each model specification (Long and Freese, 2006). These results are shown in Tables 4 to 6.

Table 4 lists FE and RE results based on all our data, clustering on each participating country. The regression coefficients are reduced progressively from the NOC to the WOF to the WIF specification, both in the FE and in the RE models. However, in no case does the *p*-value in any specification become statistically insignificant. Equivalent results are generated in Table 5, which uses the whole data as well, but now clustered in the five groups of countries listed earlier (Nordic, Continental, Liberal, Southern and Eastern). In general, we have slightly higher coefficients in the RE models compared to the FE, but the statistical significance does not change. Comparing the results of Tables 4 and 5, we note that the coefficients based on the 5 clusters of countries are somewhat larger than the ones based on the 21 countries. Nonetheless, neither the statistical significance, nor the magnitude, nor the sign of the results changes considerably in either specification.

Table 4 *Coefficients of employed people (versus unemployed people) from three specifications running fixed effects (FE) and random effects (RE) models for all countries Dependent variable: (happiness + satisfaction levels)/2*

Model	FE_NOC21	FE_WOF21	FE_WIF21	RE_NOC21	RE_WOF21	RE_WIF21
b	1.071	0.836	0.499	1.075	0.974	0.509
se	0.163	0.147	0.113	0.163	0.153	0.128
t	6.557	5.700	4.410	6.604	6.362	3.977
p	0.000	0.000	0.000	0.000	0.000	0.000
N	15681	15681	15681	15681	15681	15681
groups	21	21	21	21	21	21
r2	0.036	0.15	0.206			
r2_w	0.036	0.15	0.206	0.036	0.143	0.201
r2_o	0.052	0.177	0.272	0.052	0.19	0.28
r2_b	0.486	0.635	0.864	0.486	0.759	0.88

Note: r2 _w = R-squared within; _o = overall; _b = between; NOC = models without any control variables; WOF = models with controls variables but without financial variables; WIF = models with control variables and financial variables.

Table 5 *Coefficients of employed people (versus unemployed people) from three specifications running fixed effects (FE) and random effects (RE) models for selected groups of countries Dependent variable: (happiness + satisfaction levels)/2*

Model	FE_NOC5	FE_WOF5	FE_WIF5	RE_NOC5	RE_WOF5	RE_WIF5
b	1.144	0.854	0.519	1.152	0.974	0.509
se	0.200	0.149	0.120	0.197	0.122	0.126
t	5.711	5.751	4.338	5.834	7.971	4.051
p	0.005	0.005	0.012	0.000	0.000	0.000
N	15681	15681	15681	15681	15681	15681
groups	5	5	5	5	5	5
r2	0.040	0.161	0.225			
r2_w	0.040	0.161	0.225	0.040	0.156	0.220
r2_o	0.052	0.183	0.273	0.052	0.190	0.280
r2_b	0.953	0.791	0.944	0.953	0.907	0.960

Note: r2 _w = R-squared within; _o = overall; _b = between; NOC = models without any control variables; WOF = models with control variables but without financial variables; WIF = models with control variables and financial variables.

In Table 6 we disaggregate the data to some extent and run models separately for each of the five groups of countries. The coefficient for the employed variable again becomes smaller as we move from the NOC to the WOF and finally to the WIF specification. In the continental group of countries (CH, DE, LU, NL, FR, AT, BE) the coefficient of employed not only is reduced gradually but becomes also statistically insignificant in the WIF specification, thus supporting our hypothesis about the special importance of financial strain.

Wanting to investigate further the differences in subjective well-being among the employed and unemployed individuals across the different specifications within each country, we broke our data into 21 different groups and ran models separately for each participating country. We used the same dependent variable as above and ran several survey adjusted OLS estimations using the Huber/White/sandwich estimator correction for confidence intervals. As is always the case in such Likert scale responses, we assumed that the measurement of preferences was equal between all scales (e.g. between 0 and 1, 1 and 2, ... 9 and 10).

Table 6 *Coefficients of employed people (versus unemployed people) from three specifications per group of countries Dependent variable: (happiness + satisfaction levels)/2*

Group	nord_NOC	nord_WOF	nord_WIF	south_NOC	south_WOF	south_WIF
b	0.805	0.516	0.217	1.485	1.080	0.708
se	0.135	0.111	0.105	0.115	0.109	0.106
t	5.945	4.648	2.066	12.915	9.879	6.654
p	0.000	0.000	0.039	0.000	0.000	0.000
N	4107	4107	4107	5745	5745	5745
r2	0.022	0.165	0.208	0.056	0.178	0.238
Group	cont_NOC	cont_WOF	cont_WIF	east_NOC	east_WOF	east_WIF
b	0.682	0.513	0.296	1.433	1.256	0.778
se	0.173	0.170	0.173	0.214	0.211	0.218
t	3.931	3.017	1.706	6.687	5.951	3.571
p	0.000	0.003	0.088	0.000	0.000	0.000
N	1727	1727	1727	1713	1713	1713
r2	0.017	0.164	0.208	0.055	0.1554	0.225
Group	lib_NOC	lib_WOF	lib_WIF			
b	0.974	0.750	0.454			
se	0.123	0.122	0.120			
t	7.937	6.143	3.795			
p	0.000	0.000	0.000			
N	2389	2389	2389			
r2	0.033	0.198	0.260			

Note: NOC = models without any control variables; WOF = models with control variables but without financial variables; WIF = models with control variables and financial variables. Nord = Nordic countries; South = Southern European countries; Cont = Continental European countries; East = Eastern European countries; Lib = Liberal Countries.

No doubt, unobserved heterogeneity and selection effects of the respondents are potential caveats in this type of survey-based, cross-sectional analysis. The random probability samples of the respondents used in the ESS somewhat alleviate these problems. However, it is difficult to exercise complete control for such potential bias when considering not only the data format but also the availability of variables. For example, longitudinal data with at least two periods per observation would have served us better.

Table 7 lists the results of our runs. In the first specification (*countryinitial*_NOC), in almost all of the 21 countries surveyed, the coefficient comes out statistically significant with a positive sign. Because of the way we have coded the binary employed variable (0= unemployed, 1= employed) these results clearly indicate differences between the two groups in terms of subjective well-being. The employed have on average a higher level of well-being compared to the unemployed. It ranges from 0,49 units (Finland) to 2,18 units (Germany). In just two countries the coefficients come out statistically insignificant, but still with a positive sign (Luxembourg[5] and Portugal).

For the second specification (*countryinitial*_WOF), we report only the coefficients of the employed variable per country, although in the models we include all the control variables mentioned in the previous section.[6] The country-wise results seem to reject the deprivation theory in most cases. However, now all the coefficients have been reduced in magnitude and their significance level has been decreased, note that in addition to Luxembourg and Portugal, now also Belgium, Finland, Greece and Slovenia come out with insignificant coefficients. This may suggest that deprivation theory is supported better within each of these countries.

Table 7 *Coefficients of employed people (versus unemployed people) from three specifications per country Dependent variable: (happiness + satisfaction levels)/2*

Country	AT_NOC	AT_WOF	AT_WIF	GB_NOC	GB_WOF	GB_WIF	GR_NOC	GR_WOF	GR_WIF
b	1.090	0.922	0.658	1.541	1.433	0.949	0.814	0.579	0.358
se	0.420	0.386	0.409	0.311	0.321	0.338	0.318	0.321	0.331
t	2.594	2.389	1.609	4.955	4.468	2.807	2.557	1.802	1.082
p	0.010	0.017	0.108	0.000	0.000	0.005	0.011	0.072	0.280
N	746	746	746	926	926	926	529	529	529
r2	0.019	0.138	0.175	0.052	0.139	0.210	0.022	0.215	0.251
Country	BE_NOC	BE_WOF	BE_WIF	HU_NOC	HU_WOF	HU_WIF	NO_NOC	NO_WOF	NO_WIF
b	0.506	0.308	-0.061	1.057	0.732	0.366	1.269	0.874	0.488
se	0.200	0.205	0.209	0.259	0.257	0.263	0.402	0.273	0.251
t	2.527	1.505	-0.294	4.078	2.846	1.389	3.153	3.202	1.949
p	0.012	0.133	0.769	0.000	0.005	0.165	0.002	0.001	0.052
N	745	745	745	592	592	592	1226	1226	1226
r2	0.011	0.114	0.195	0.033	0.221	0.265	0.041	0.176	0.217
Country	CH_NOC	CH_WOF	CH_WIF	IE_NOC	IE_WOF	IE_WIF	PL_NOC	PL_WOF	PL_WIF
b	1.038	0.976	0.696	1.420	1.139	0.635	0.723	0.676	0.385
se	0.360	0.338	0.320	0.295	0.267	0.265	0.184	0.184	0.184
t	2.881	2.889	2.173	4.818	4.261	2.401	3.936	3.674	2.091
p	0.004	0.004	0.030	0.000	0.000	0.017	0.000	0.000	0.037
N	904	904	904	787	787	787	823	823	823
r2	0.021	0.166	0.212	0.069	0.207	0.27	0.022	0.199	0.246
Country	CZ_NOC	CZ_WOF	CZ_WIF	FI_NOC	FI_WOF	FI_WIF	PT_NOC	PT_WOF	PT_WIF
b	1.320	1.061	0.661	0.489	0.169	-0.137	0.194	-0.397	-0.439
se	0.424	0.381	0.396	0.158	0.157	0.149	0.570	0.406	0.408
t	3.113	2.784	1.670	3.107	1.074	-0.921	0.341	-0.979	-1.076
p	0.002	0.006	0.096	0.002	0.283	0.357	0.733	0.328	0.282
N	401	401	401	960	960	960	468	468	468
r2	0.037	0.228	0.283	0.012	0.163	0.214	0.001	0.281	0.289

(continued)

Country	DE_NOC	DE_WOF	DE_WIF	LU_NOC	LU_WOF	LU_WIF	SE_NOC	SE_WOF	SE_WIF
b	2.180	1.783	1.186	1.019	0.078	-0.016	0.738	0.551	0.362
se	0.176	0.173	0.180	0.850	0.864	0.818	0.252	0.233	0.229
t	12.363	10.304	6.600	1.198	0.090	-0.020	2.925	2.367	1.581
p	0.000	0.000	0.000	0.232	0.928	0.984	0.004	0.018	0.114
N	1235	1235	1235	383	383	383	1106	1106	1106
r2	0.158	0.265	0.325	0.009	0.193	0.233	0.015	0.201	0.232
Country	DK_NOC	DK_WOF	DK_WIF	IT_NOC	IT_WOF	IT_WIF	SI_NOC	SI_WOF	SI_WIF
b	0.947	0.718	0.410	1.253	0.785	0.577	0.807	0.328	0.191
se	0.254	0.218	0.207	0.326	0.367	0.395	0.246	0.250	0.231
t	3.733	3.286	1.975	3.839	2.138	1.461	3.274	1.312	0.826
p	0.000	0.001	0.049	0.000	0.033	0.145	0.001	0.190	0.409
N	815	815	815	285	285	285	573	573	573
r2	0.041	0.177	0.224	0.064	0.283	0.33	0.024	0.219	0.301
Country	ES_NOC	ES_WOF	ES_WIF	NL_NOC	NL_WOF	NL_WIF	FR_NOC	FR_WOF	FR_WIF
b	0.545	0.735	0.538	0.569	0.374	0.096	1.001	0.800	0.638
se	0.227	0.232	0.248	0.200	0.178	0.160	0.331	0.272	0.282
t	2.398	3.162	2.170	2.840	2.098	0.601	3.027	2.938	2.264
p	0.017	0.002	0.031	0.005	0.036	0.548	0.003	0.003	0.024
N	445	445	445	1093	1093	1093	639	639	639
r2	0.018	0.156	0.19	0.008	0.156	0.218	0.029	0.228	0.27

Note: NOC = models without any control variables; WOF = models with control variables but without financial variables; WIF = models with control variables and financial variables. Country abbreviations as in Table 2.

In our third and final specification (*countryinitial*_WIF), we add to the RHS of the second specification the two variables representing financial constraint. If the theory of financial strain were to be supported empirically, we should see the coefficients turn statistically insignificant. We observe that this is indeed the case for seven countries examined: Austria, the Czech Republic, Hungary, Italy, The Netherlands, Norway and Sweden. In another nine countries (Switzerland, Germany, Denmark, Spain, Great Britain, Ireland, Israel, France and Poland) the coefficients remain statistically significant but are nevertheless reduced compared with the results in the second specification. Finally, the countries remaining (Belgium, Finland, Luxembourg, Greece, Portugal and Slovenia) come out with insignificant coefficients as in the previous specification.

This last specification gives fairly strong evidence that, if we are able to control for variables representing financial strain, the levels of subjective well-being among employed and unemployed individuals do indeed converge significantly. In most countries, financial strain is the most important factor influencing this convergence.

Discussion

In this study we conducted an empirical test of three rival theories about the effects of unemployment on well-being: the deprivation theory, the incentive paradigm and the financial strain approach. The deprivation theory stresses the psychological consequences of unemployment. Work as such, is an important determinant of well-being. More specifically, the loss of the various latent functions of work is detrimental to a person's well-being. The incentive theory paints exactly the opposite picture of the life situation of the unemployed. It claims that the well-being of the unemployed is too high, making them unwilling to re-enter the labour market. This idea is based on the assumption that an important proportion of unemployment is voluntary in nature. Both of these paradigms can be criticized for not fully understanding the adverse effects of financial strain on individuals' well-being.

We are aware that these theories do not capture all possible mechanisms in how well-being is determined during unemployment. The reason for concentrating only on these theories is that currently they are the most influential descriptions of the life situations of the unemployed. In particular, the influence of the incentive approach has been visible in the labour market policies in all European countries.

Consistent with numerous earlier studies, our results show that when people become unemployed their level of well-being is likely to be damaged. This basic result partly supports the deprivation theory and, at the same time, strongly questions the incentive approach. If unemployment was largely voluntary or a deliberate choice, the unemployed should be as content with their lives as those who have jobs. Claims about false incentives as a cause of unemployment seem practically inappropriate in the light of our empirical analysis.

We also tested the incentive theory in a structural perspective by grouping our countries into five welfare regimes. Our analysis did not reveal clear effects of the varying institutional settings. Most importantly, the decline in well-being during unemployment is also quite pronounced in the most developed welfare states. Put differently, unemployment is far from a pleasant experience even if the levels of social security benefits are comparatively high.

But our results do not fully support the deprivation theory either. Although for many decades researchers have shown evidence for the deprivation theory, our findings suggest that sometimes life is simpler, the most important determinant of well-being during unemployment being money. In several countries the financial conditions of the respondent seem to be the most important determinant of well-being. Contrary to the thrust of deprivation theory, the decline of well-being among the unemployed is not always a consequence of lack of work *per se*. Rather, the financial strain associated with unemployment causes the decline of well-being.

However, our findings are not entirely contradictory to the deprivation theory. In many countries, non-financial factors do indeed affect the level of well-being. Although financial hardship is the most important predictor of poor mental well-being among the unemployed, it is not the only one. We can thus conclude that the decline of well-being among the unemployed is related first of all to the financial strain that most unemployed individuals experience across Europe. Second, the decline is also related to an array of non-financial factors which are most probably linked to the psychological implications of the loss of the latent functions of work.

Our analysis has clear policy implications. Recently, unemployment policies in many countries have adopted the standpoints of the incentive theory and, to a lesser extent, of the deprivation theory. In many European countries social protection and especially unemployment benefits have been cut in order to create more incentives for the unemployed to re-enter the labour market. The main emphasis has been on labour market integration rather than on economic security, which is considered a passive form of unemployment policy. We do not argue against active labour market policy measures, but in the light of our analysis it seems evident that the disincentives, as measured by the well-being of the unemployed, are not a real problem. Rather, it is possible that reducing financial and other benefits for the unemployed may, in the end, be counterproductive. A decent standard of living during unemployment ensures that an individual does not develop mental problems, protects him/her from a loss of self-esteem, depression and psychological stress, and, finally, makes him/her a more appealing applicant in the labour market.

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Notes

1. More information about the ESS can be found at http://www.europeansocialsurvey.org.
2. Respondents' household income is measured with a rough ordinal variable in the ESS. We regrouped the respondents in each country to three groups: those with a low income, middle income and high income.
3. Naturally, the unemployed only have former work colleagues, who may still constitute a part of the surrounding social networks, just like other friends and neighbours do.
4. We used Stata's xtreg command.
5. The results concerning Luxembourg should be interpreted with care because of the very low amount of unemployed observations (just 13; see Table 2).
6. Detailed outputs of all models depicting the effects for all independent variables are available from the authors upon request.

References

Alvaro, J. L. and Garrido, A. (2003) 'Economic Hardship, Employment Status and Psychological Well-being of Young People in Europe', in T. Hammer (ed.) *Youth Unemployment and Social Exclusion in Europe*, pp. 173–92. Bristol: Policy Press.

Béland, F., Birch, S. and Stoddart, G. (2002) 'Unemployment and Health: Contextual-Level Influences on the Production of Health in Populations', *Social Science & Medicine* 55: 2033–52.

Bjarnason, T. and Sigurdardottir, T. J. (2003) 'Psychological Distress during Unemployment and Beyond: Social Support and Material Deprivation among Youth in Six Northern European Countries', *Social Science & Medicine* 56: 973–85.

Blanchard, O. (2006) 'European Unemployment: The Evolution of Facts and Ideas', *Economic Policy* 21: 5–59.

Brenner, S. O. and Starrin, B. (1988) 'Unemployment and Health in Sweden: Public Issues and Private Troubles', *Journal of Social Issues* 44: 125–40.

Clark, A. E. and Oswald, A. J. (1994) 'Unhappiness and Unemployment', *The Economic Journal* 104: 648–59.

Creed, P. A. and Macintyre, S. R. (2001) 'The Relative Effects of Deprivation of the Latent and Manifest Benefits of Employment on the Well-Being of Unemployed People', *Journal of Occupational Health Psychology* 6: 324–31.

Ellison, C. G. (1991) 'Religious Involvement and Subjective Well-Being', *Journal of Health and Social Behavior* 32: 80–99.

Ensminger, M. E. and Celentano, D. D. (1990) 'Gender Differences in the Effect of Unemployment on Psychological Distress', *Social Science & Medicine* 30: 469–77.

Erikson, R. and Goldthorpe, J. (1992) *The Constant Flux. A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon.

Ervasti, H. (2004) 'Työttömyys Elämäntilanteena – Ikäryhmittäistä Vertailua', in J. Erola and T.-A. Wilska (eds) *Yhteiskunnan Moottori vai Kivireki. Suuret Ikäluokat ja 1960-lukulaisuus*, pp. 139–59. Jyväskylä: Minerva.

Ervasti, H., Firdberg, T., Hjerm, M. and Ringdal, K. (eds) (2008) *Nordic Social Attitudes in a European Perspective*. London: Edward Elgar.

Feather, N. T. (1989) 'Reported Changes in Behaviour after Job Loss in a Sample of Older Unemployed Men', *Australian Journal of Psychology* 41: 175–85.

Frey, B. S. and Stutzer, A. (2002) *Happiness and Economics*. Princeton, NJ: Princeton University Press.

Fryer, D. (1986) 'Employment Deprivation and Personal Agency during Unemployment', *Social Behaviour* 1: 3–23.

Fryer, D. (1995) 'Benefit Agency? Labour Market Disadvantage, Deprivation and Mental Health', *The Psychologist* 8: 265–72.

Gallie, D. and Russell, H. (1998) 'Unemployment and Life Satisfaction: a Cross-Cultural Comparison', *European Journal of Sociology* 39: 248–80.

Gartner, J., Larson, D. B. and Allen, G. D. (1991) 'Religious Commitment and Mental Health: a Review of the Empirical Literature', *Journal of Psychology and Theology* 19: 6–25.

Gerdtham, U.-G. and Johannesson, M. (2001) 'The Relationship Between Happiness, Health, and Socio-Economic Factors: Results Based on Swedish Micro Data', *Journal of Socio-Economics* 30: 553–7.

Goldsmith, A. H., Veum, J. R. and Darity, W. (1997) 'Unemployment, Joblessness, Psychological Well-Being and Self-Esteem: Theory and Evidence', *Journal of Socio-Economics* 26: 133–58.

Goul Andersen, J. (2002) 'Coping with Long-Term Unemployment: Economic Security, Labour Market Integration and Well-Being. Results from a Danish Panel Study, 1994–1999', *International Journal of Social Welfare* 11: 178–90.

Goul Andersen, J. and Halvorsen, K. (2002) 'Changing Labour Markets, Unemployment and Unemployment Policies in a Citizenship Perspective', in J. Goul Andersen, J. Clasen, W. van Oorschot and K. Halvorsen (eds) *Europe's New State of Welfare*, pp. 1–19. Bristol: Policy Press.

Hakim, C. (1991) 'Grateful Slaves and Self-Made Women: Fact and Fantasy in Women's Work Orientations', *European Sociological Review* 7: 101–21.

Halvorsen, K. (1999) *Arbeidsløshet som Sosialt Problem*. HiO-rapport nr. 13, Oslo: Høgskolen i Oslo.

Hobfoll, S., Freedy, J., Green, B. and Solomon, S. (1996) 'Coping in Reaction to Extreme Stress: the Roles of Resource Loss and Resource Availability', in M. Zeidner and N. Endler (eds) *Handbook of Coping: Theory, Research, Applications*, pp. 322–49. New York: Wiley.

Jahoda, M. (1982) *Employment and Unemployment. A Socio-Psychological Analysis*. Cambridge: Cambridge University Press.

Jahoda, M., Lazarsfeld, P. F. and Zeisel, H. (1971) *Marienthal. The Sociography of an Unemployed Community*. Chicago, IL: Aldine-Atherton.

Jarvis, G. and Northcott, H. (1987) 'Religion and Differences in Morbidity and Mortality', *Social Science and Medicine* 25: 813–24.

Jones, L. (1992) 'Specifying the Temporal Relationship Between Job Loss and Consequences: Implications for Service Delivery', *Journal of Applied Social Science* 37: 359–64.

Jowell, R. and the Central Co-ordinating Team (2003) *European Social Survey 2002/2003. Technical Report*. London: Centre for Comparative Social Surveys, City University.

Julkunen, I. (2001) 'Coping and Mental Well-Being among Unemployed Youth – A Northern European Perspective', *Journal of Youth Studies* 4: 261–78.

Kessler, R., Turner, J. and House, J. (1988) 'Effects of Unemployment in a Community Sample: Main, Modifying and Mediating Effects', *Journal of Social Issues* 44: 69–85.

Larson, D. B., Sherill, K. A., Lyons, J. S., Craigie, F. C., Thielman, S. B., Greenwold, M. A. and Larson, S. S. (1992) 'Associations Between Dimensions of Religious Commitment and Mental Health Reported in the American Journal of Psychiatry and Archives of General Psychiatry: 1978–1989', *American Journal of Psychiatry* 149: 557–9.

Long, J. C. and Freese, J. (2006) *Regression Models for Categorical Dependent Variables Using Stata*. College Station: Stata Press Publication.

Mortensen, D. T. (1977) 'Unemployment Insurance and Job Search Decisions', *Industrial and Labor Relations Review* 30: 505–17.

Murray, C. (1990) *The Emerging British Underclass*. London: IEA Health and Welfare Unit.

Nickell, S. (1997) 'Unemployment and Labor Market Rigidities: Europe versus North America', *Journal of Economic Perspectives* 11: 55–74.

Nickell, S., Nunziata, L. and Ochel, W. (2005) 'Unemployment in the OECD since the 1960s. What Do We Know?', *Economic Journal* 115 (January): 1–27.

Nordenmark, M. (1999) 'Non-Financial Employment Motivation and Well-Being in Different Labour Market Situations: a Longitudinal Study', *Work, Employment and Society* 13: 601–20.

Nordenmark, M. and Strandh, M. (1999) 'Towards a Sociological Understanding of Mental Well-Being among the Unemployed: The Role of Economic and Psychosocial Factors', *Sociology* 33: 577–97.

Rabe-Hesketh, S. and Skrondal, A. (2008) *Multilevel and Longitudinal Modelling Using Stata*. College Station: Stata Press.

Siebert, H. (1997) 'Labor Market Rigidities: At the Root of Unemployment in Europe', *Journal of Economic Perspectives* 11: 37–54.

Starrin, B., Rantakeisu, U. and Hagquist, C. (1996) 'Om Arbetslöshetens Ekonomi och Skam', *Socialvetenskaplig tidskrift* 3: 91–115.

Svallfors, S., Andersen, J. G. and Halvorsen, K. (2001) 'Work Orientations in Scandinavia: a Comparison of Denmark, Norway and Sweden', *Acta Sociologica* 44: 139–56.

Thoits, P. A. (1982) 'Conceptual, Methodological and Theoretical Problems in Studying Social Support as a Buffer Against Life Stress', *Journal of Health and Social Behavior* 23: 145–59.

Ullah, P. (1990) 'The Association between Income, Financial Strain and Psychological Well-Being among Unemployed Youths', *Journal of Occupational Psychology* 63: 317–30.

Veenhoven, R. (1984) *Conditions of Happiness*. Dordrecht: Kluwer.

Veenhoven, R. (1996) 'Developments in Satisfaction Research', *Social Indicators Research* 37: 1–46.

Vinokur, A. D. and Schul, Y. (2002) 'The Web of Coping Resources and Pathways to Reemployment Following a Job Loss', *Journal of Occupational Health Psychology* 7: 68–83.

Warr, P. (1987) *Work, Unemployment and Mental Health*. Oxford: Clarendon Press.

Waters, L. E. and Moore, K. A. (2002) 'Reducing Latent Deprivation during Unemployment: the Role of Meaningful Leisure Activity', *Journal of Occupational and Organizational Psychology* 75: 15–32.

Whelan, C. T. (1994) 'Social Class, Unemployment and Psychological Distress', *European Sociological Review* 10: 49–61.

Winefield, A. H., Tiggemann, M. and Winefield, H. R. (1992) 'Spare Time Use and Psychological Well-Being in Employed and Unemployed Young People', *Journal of Occupational and Organizational Psychology* 65: 307–13.

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